



U.S. Department  
of Homeland Security

United States  
Coast Guard

## LOCAL NOTICE TO MARINERS WEEKLY EDITION

**District: 13**

**Week: 19/04**

Boating Safety Classes or Information: 1-800-336-BOAT (2628)

ISSUED BY: COMMANDER, THIRTEENTH COAST GUARD DISTRICT (oan)  
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LIGHT LIST REFERENCE: COMDTPUB P16502.6, Light List Volume VI, 2004 Edition

### UNITED STATES COAST GUARD NAVIGATION INFORMATION SERVICE (NIS)

The United States Coast Guard Navigation Information Service (NIS), operated by the USCG Navigation Center, is staffed 24 hours a day, 7 days a week. The NIS provides information on the current operational status, effective policies, and general information for GPS, DGPS, and LORAN-C. The NIS also disseminates Safety Broadcasts (BNM), Local Notice to Mariners (LNM), and the latest Notice Advisory to Navstar Users (NANU). NANU notices can also be obtained via e-mail subscription through the USCG Navigation Center website

<http://www.navcen.uscg.gov/gps/status/default.htm>.

In addition, the NIS investigates all reports of degradation or loss of GPS, DGPS or LORAN service. Mariners are encouraged to report all degradation of radio navigation services to the NIS via any of the following: Phone: 703-313-5900, Email: [webmaster@navcen.uscg.mil](mailto:webmaster@navcen.uscg.mil) or on the World Wide Web at: <http://www.navcen.uscg.gov>.

### BROADCAST NOTICE TO MARINERS

This section contains a range of all the significant Broadcast Notice to Mariners (BNM's) on the date of this edition.

| <u>Originating Unit</u> | <u>Beginning BNM</u> | <u>Ending BNM</u> |
|-------------------------|----------------------|-------------------|
| CGD THIRTEEN            | D13-0488-04          | D13-0510-04       |

### ABBREVIATIONS

ACOE - Army Corps of Engineers  
ADRIFT - Buoy Adrift  
AICW - Atlantic Intracoastal Waterway  
B - Buoy  
BKW - Breakwater  
B - Refer to Light List  
BNM - Broadcast Notice to Mariner  
CG - Refer to Light List  
CHAN - Channel  
CGD - Coast Guard District  
CR - Refer to Light List  
C/O - Cut Off  
CONT - Contour  
CONSTR - Construction  
CRK - Creek  
CONST - Construction  
DBN - Daybeacon  
DBD/DAYBD - Dayboard  
DBN/DEST - Daybeacon Destroyed  
DBN IMCH - Daybeacon Improper Characteristic  
DISCON - Discontinued  
DMGD - Daybeacon Damaged

EST - Established Aid  
EVAL - Evaluation  
EXT - Extinguished  
FL - Flashing  
F/S - Fog Signal  
HAZ - Hazard to Navigation  
HBR - Harbor  
HOR - Horizontal Clearance  
HT - Height  
ICW - Intracoastal Waterway  
IMPCHA - Improper Characteristics  
INL - Inlet  
INOP - Not Operating  
ISL - Islet  
KBG - Refer to Light List  
KBG-I - Refer to Light List  
KBR - Refer to Light List  
KBR-I - Refer to Light List  
KBW - Refer to Light List  
KGB - Refer to Light List  
KGB-I - Refer to Light List  
KGR - Refer to Light List  
KGR-I - Refer to Light List

KGW - Refer to Light List  
KGW-I - Refer to Light List  
KRB - Refer to Light List  
KRB-I - Refer to Light List  
KRG - Refer to Light List  
KRG-I - Refer to Light List  
KRW - Refer to Light List  
KWB - Refer to Light List  
KWB-I - Refer to Light List  
KWG - Refer to Light List  
KWG-I - Refer to Light List  
KWR - Refer to Light List  
KWR-I - Refer to Light List  
LAT - Latitude  
LB - Lighted Buoy  
LBB - Lighted Bell Buoy  
LHB - Lighted Horn Buoy  
LGB - Lighted Gong Buoy  
LONG - Longitude  
LNM - Local Notice to Mariners  
LT - Light  
LT CONT - Light Continuous  
LWB - Lighted Whistle Buoy

MISS - Missing  
 MR - Refer to Light List  
 MR-I - Refer to Light List  
 N/A - Not Available  
 NB - Refer to Light List  
 N/C - Not Charted  
 ND - Refer to Light List  
 NG - Refer to Light List  
 NIMA - National Imagery and Mapping Agency  
 NL - Refer to Light List  
 NO - Number  
 NOS - National Ocean Service  
 NR - Refer to Light List  
 NW - Refer to Light List  
 NW - Notice Writer  
 NY - Refer to Light List

OBSCU - Obscured  
 OBST - Obstruction  
 OBSTR - Obstruction  
 PRIV - Private Aid  
 RBN - Radio Beacon  
 REBUILT - Aid Rebuilt  
 RECOVERED - Aid Recovered  
 RED - Red Buoy  
 REDINT - Reduced Intensity  
 RRL - Range Rear Light  
 RELIGHTED - Aid Relighted  
 RELOC - Relocated  
 RESET ON STATION - Aid Reset on Station  
 RFL - Range Front Light  
 RIV - River  
 SEC - Section

SG - Green Square on pile  
 SG-SY - Green Square with Yellow Square on pile  
 SHL - Shoaling  
 SND - Sound  
 STM - Statue Mile  
 TEMP - Temporary Aid Change  
 TR - Red Triangle on pile  
 TRLB - Temporarily Replaced by Lighted Buoy  
 TRLT - Temporarily Replaced by Light  
 TR-TY - Red Triangle with Yellow Triangle on pile  
 TRUB - Temporarily Replaced by Unlighted Buoy

#### Additional Abbreviations Specific to this LNM Edition:

LED - Light Emitting Diode

LWP - Light Watching Properly

CPA - Point of Closest Approach

### SECTION I - SPECIAL NOTICES

This section contains information of special concern to the Mariner.

#### COLUMBIA AND SNAKE RIVERS - 2004 Summer Seasonal Lockage Schedule for Recreational Craft

The U.S. Army Corps of Engineers, Walla Walla and Portland Districts, have implemented the 2004 summer seasonal lockage schedule effective from 15 May to 15 September 04 for the passage of recreational craft through the following navigation locks:

| Walla Walla District Locks |                         |       | Portland District Locks |                         |       |
|----------------------------|-------------------------|-------|-------------------------|-------------------------|-------|
| Navigation Lock            | Location                | Chart | Navigation Lock         | Location                | Chart |
| McNary Dam                 | Columbia River Mile 292 | 18539 | Bonneville Dam          | Columbia River Mile 145 | 18531 |
| Ice Harbor Dam             | Snake River Mile 9.7    | 18545 | The Dalles Dam          | Columbia River Mile 191 | 18533 |
| Lower Monumental Dam       | Snake River Mile 41.6   | 18545 | John Day Dam            | Columbia River Mile 216 | 18535 |
| Little Goose Dam           | Snake River Mile 70.3   | 18546 |                         |                         |       |
| Lower Granite Dam          | Snake River Mile 107.3  | 18548 |                         |                         |       |

When a recreational vessel lockage schedule is in effect, recreational vessels will only be allowed to lock through at the times designated for such lockages and they will take precedence over commercial vessels. Commercial vessels will continue to be locked through upon arrival except during the times specified for recreational vessel lockages. At the discretion of the lock operator, recreational vessels may be allowed to lock through with commercial craft. All vessel owner/operators lock through at their own risk. Follow the directions of the lock operator when using the locks or operating in the vicinity of the locks. The lock operator has the final authority on the suitability of a craft for lockage. Refer to the U.S. Army Corps of Engineers Safe Lockage Policy for Recreational Craft on the Columbia and Snake Rivers for additional safety requirements. For additional information on this matter or copies of the Safe Lockage policy, visit the following website: <http://www.nwp.usace.army.mil/op/s/nl> or contact the Walla Walla District at (509) 527-7115/(509) 527-7113 or the Portland District at (503) 808-4332/(503) 808-4333.

The three Portland District Locks and the five Walla Walla District Locks will use the same lockage schedule making the lockage times for the entire Columbia/Snake River system identical for recreational vessels. The following seasonal recreational craft lockage schedule will be implemented beginning 15 May 2004:

| Traffic Direction   | Times     |            |           |           |           |
|---------------------|-----------|------------|-----------|-----------|-----------|
| Upstream Lockages   | 9:00 a.m. | 12:01 p.m. | 3:00 p.m. | 6:00 p.m. | 9:00 p.m. |
| Downstream Lockages | 9:30 a.m. | 12:30 p.m. | 3:30 p.m. | 6:30 p.m. | 9:30 p.m. |

Consideration will be given for special lockages to flotillas or other unique events sponsored by yacht clubs, marinas, and other groups, provided advance (24 hours) arrangements have been made with the appropriate operations manager or their appointed representative. The following project office and operations managers should be contacted for scheduling of special lockages:

| Project               | Operations Managers    | Phone Number        | Alternate Number    |
|-----------------------|------------------------|---------------------|---------------------|
| Bonneville            | Chief Operator on Duty | (541) 374-8323      | N/A                 |
| The Dalles            | Chief Operator on Duty | (541) 298-4007      | N/A                 |
| John Day              | Chief Operator on Duty | (541) 298-9712      | N/A                 |
| McNary                | Randell Ryan           | (541) 922-2251      | (541) 922-3214      |
| Ice Harbor            | Scott Sutliff          | (509) 543-3251      | (509) 547-7783      |
| Lower Monumental      | Matt Allen             | (509) 282-7353      | (509) 282-3218      |
| Little Goose Project  | Scott Ross             | (509) 399-2233 x253 | (509) 399-2233 x231 |
| Lower Granite Project | Martin Mendiola        | (509) 843-1493 x258 | (509) 843-1493 x231 |

Chart N/A

LNM: 19/04

#### WASHINGTON - ROSARIO STRAIT - Diving Operations

Diving operations will be conducted from 0930 to 1400 local on 14 May 04 at 48-21-03.5N 122-44-32.1W. The diving platform will monitor VHF-FM Channels 5A and 13. Mariners are requested to use caution in the dive area. For additional information, contact Adventures Down Under at (360) 676-4177.

Chart 18523

LNM: 19/04

#### WASHINGTON - OFFSHORE - Research Buoys

The Olympic Coast National Marine Sanctuary will be deploying research buoys in the waters of the sanctuary from 17 May to 08 Oct 04. These buoys will be anchored in depths between 15 and 42 meters. Each buoy will consist of unlit, 16ft halibut longline, and aluminum poles with floats and red flags, each topped with a radar reflector. The locations of the buoys are:

| Buoy | Latitude    | Longitude    | Planned depth |
|------|-------------|--------------|---------------|
| MB-1 | 48-19-30.0N | 124-40-54.0W | 15m           |
| MB-2 | 48-19-18.0N | 124-44-18.0W | 42m           |
| CA-1 | 48-09-54.0N | 124-45-24.0W | 15m           |
| CA-2 | 48-09-54.0N | 124-48-12.0W | 42m           |
| TH-1 | 47-52-30.0N | 124-37-06.0W | 15m           |
| TH-2 | 47-50-42.0N | 124-37-42.0W | 31m           |
| KL-1 | 47-35-54.0N | 124-25-36.0W | 15m           |
| KL-2 | 47-35-36.0N | 124-29-36.0W | 27m           |
| CE-1 | 47-21-19.0N | 124-28-06.0W | 42m           |

For additional information, contact Olympic Coast National Marine Sanctuary at (360) 457-6622.  
Chart 18480 LNM: 1904

#### WASHINGTON - OFFSHORE - Ocean Operations

Ocean operations will be conducted in an 8NM circle centered at 48-07-00N 125-30-00W from 0001 15 May to 2359 local 28 May 04. The operation will present a hazard to fishing gear. The R/V Katmai will be on site from 15 May to 20 May and the M/V Independence will be on site from 21 May to 29 May 04. The on site vessel may be contacted on V HF-FM Channel 16. Mariners are requested to maintain a 4NM CPA from this position. For additional information, contact NFESC at (805) 982-1270.

Chart 18480 LNM: 19/04

#### WYOMING - LORAN-C - Outage Proposal

This is a proposal to authorize LORSTA Gillette Wyoming (rate 9610-V/8290-X) unusable time from 1500Z to 2100Z 15 Jun 04 with the alternate time from 1500Z to 2100Z 16 Jun 04. Objections will be considered until 1500Z 10 Jun 04. Users shall address inquiries to the South Central U.S. Loran-C Chain Operations Control Officer at (703) 313-5873.

Chart N/A LNM: 19/04

#### WASHINGTON - ROSSARIO STRAIT - Research Buoys

NOAA has established three temporary yellow lighted research buoys showing the characteristic Flashing Yellow 6 seconds (Fl Y 6s) for a period of 8 to 10 weeks.

|        |                          |
|--------|--------------------------|
| Buoy 1 | 48-28-32.7N 122-42-40.2W |
| Buoy 2 | 48-28-35.9N 122-52-53.2W |
| Buoy 3 | 48-28-30.6N 122-42-51.9W |

Chart 18421 LNM: 18/04

#### COLUMBIA RIVER - APPROACHES TO ASTORIA - Scientific Buoys

Oregon State University has deployed 38 scientific buoys on both sides of the navigational channel from river mile 0 to river mile 4, 20 scientific buoys from bank to bank on the west side of the Astoria Bridge at river mile 13, and 13 scientific buoys from bank to bank near Jim Crow Point at river mile 29 all on the Columbia River. Each buoy is a system of four 7in by 15in Styrofoam floats with attached contact information. For additional information, contact Oregon State University at (541) 737-2592.

Charts 18521, 18523 LNM: 18/04

#### COLUMBIA RIVER - LAKE UMATILLA - Port Closure

The Port of Morrow is closed to commercial traffic until further notice due to hazardous conditions resulting from a partial crane collapse at the dock. For additional information, contact the Captain of the Port at (503) 240-9305.

Chart 18535 LNM: 17/04

#### MONTANA - BILLINGS DGPS SITE - Off-Air

Billings, MT DGPS site will be off-air from 1600Z to 1800Z 15 May 04 and possibly from 1600Z to 1800Z 16 May 04. For additional information, contact the Navigation Center West at (707) 765-7612.

Chart N/A LNM: 17/04

#### WASHINGTON - PUGET SOUND - Diving operations

Geoduck harvesting diving operations will be conducted in the vicinity of Skiff Point from 0800 to 1600 local, Monday through Friday excluding state holidays, from 08 Apr to 21 Jun 04. The Department of Natural Resources patrol boat will be on site and monitoring VHF-FM Channel 8. Mariners are requested to maintain a 300ft CPA from the dive vessels. For additional information, contact the Washington Department of Natural Resources at (360) 902-1100.

Chart 18448 LNM: 15/04

**WASHINGTON - STRAIT OF JUAN DE FUCA, STRAIT OF GEORGIA AND SAN JUAN ISLANDS - Survey Operations**

The Washington Department of Fish and Wildlife (WDFW) will be conducting a resource survey for bottom fishes from 19 Apr to 18 Jun 04. The survey will be in the Strait of Juan De Fuca east to Port Townsend and Whidbey Island and north to the San Juan Islands and the Strait of Georgia to the U.S. - Canada border. The F/V Chasina has been chartered by the WDFW, has a sign WDFW RESEARCH posted on the side and will be monitoring VHF-FM Channel 16. Vessels are requested to exercise caution in the vicinity of the research vessel. For additional information, contact WDFW at (425) 379-2313.

Charts 18460, 18465, 18421

LNM: 15/04

**COLUMBIA RIVER - THE DALLES - Telemetry Barges**

USGS Columbia River Research Lab deployed 20 6ft by 8ft pontoon barges, each showing flashing yellow 4 seconds (FI Y 4s) lights, located on the Oregon side, outside the shipping channel between the Dalles Dam and mile 193 on the Columbia River. An additional 28 pontoon barges were deployed in the Boat Restriction Zone (BRZ) above the Dalles Dam, each showing flashing yellow 4 seconds (FI Y 4s) lights. All the barges are to be removed prior to 31 Aug 04. For additional information, contact Columbia River Research Laboratory at (509) 538-2299 Ext 267.

Chart 18533

LNM: 15/04

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**SECTION II - DISCREPANCIES**

This section lists all reported and corrected discrepancies related to Aids to Navigation in this edition. A discrepancy is a change in the status of an aid to navigation that differs from what is published or charted.

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**DISCREPANCIES (FEDERAL AIDS)**

| LLNR          | Aid Name  | Status                                 | Chart No | BNM Ref.    | LNM St | LNM End |
|---------------|---|--|----------|-------------|--------|---------|
| 765/<br>16150 | Duntze Rock Lighted<br>Whistle Buoy 2D              | REDINT / 3NM TEMP LED                  | 18480    | D13-0755-03 | 26/03  |         |
| 8605          | Chetco River Entrance Lighted<br>Bell Buoy 2        | Off Station                            | 18602    | D13-0509-04 | 19/04  |         |
| 8735          | Coos Bay Entrance Lighted<br>Bell Buoy 1            | REDINT / 3NM TEMP LED                  | 18587    | D13-0202-04 | 07/04  |         |
| 8755          | Coos Bay North Jetty Lighted<br>Gong Buoy 3         | Off Station / 42.7 yds bearing 267.5°T | 18587    | D13-0164-04 | 06/04  |         |
| 8775          | Coos Bay Channel<br>Lighted Bell Buoy 5             | Off Station / 12 yds bearing 120°T     | 18587    | D13-0260-04 | 10/04  |         |
| 9710          | Yaquina River Light 25                              | EXT                                    | 18561    | D13-0510-04 | 19/04  |         |
| 9815          | Tillamook Bay Entrance Bell<br>Buoy 1               | MISS                                   | 18521    | D13-0242-04 | 09/04  |         |
| 10100         | Astoria Crossing Lighted<br>Buoy 37                 | EXT                                    | 18521    | D13-0508-04 | 19/04  |         |
| 16075         | Quillayute River Approach<br>Lighted Whistle Buoy Q | REDINT / 3NM TEMP LED                  | 18480    | D13-0883-03 | 30/03  |         |
| 16085         | Quillayute River Entrance Buoy 2                    | MISS                                   | 18480    | D13-0306-04 | 12/04  |         |
| 16155         | Waadah Island Light                                 | REDINT / F/S INOP                      | 18460    | D13-0335-04 | 12/04  |         |
| 16335         | New Dungeness Light                                 | F/S INOP                               | 18465    | D13-0501-04 | 18/04  |         |
| 17615         | Kilisut Harbor Daybeacon 8                          | Structure MISS / TRUB                  | 18441    | D13-0710-03 | 25/03  |         |
| 19805         | Skipjack Island Light                               | REDINT                                 | 18421    | D13-0402-04 | 16/04  |         |
| 19935         | International Boundary<br>Range C Front Light       | IMPCHA / DBD Faded and Peeling         | 18421    | D13-1191-02 | 38/02  |         |

**DISCREPANCIES (FEDERAL AIDS) CORRECTED**

| LLNR | Aid Name | Status | Chart No | BNM Ref. | LNM St | LNM End |
|------|----------|--------|----------|----------|--------|---------|
| None |          |        |          |          |        |         |

**DISCREPANCIES (PRIVATE AIDS)**

| LLNR | Aid Name                            | Status | Chart No | BNM Ref.    | LNM St | LNM End |
|------|-------------------------------------|--------|----------|-------------|--------|---------|
| 9185 | North Slough Channel<br>Daybeacon 4 | IMPCHA | 18587    | D13-0478-04 | 18/04  |         |
| 9190 | North Slough Channel                | IMPCHA | 18587    | D13-1144-02 | 36/02  |         |

|       |  |             |       |             |       |  |
|-------|--|-------------|-------|-------------|-------|--|
|       | Daybeacon 8                                      |             |       |             |       |  |
| 9195  | Haynes Inlet Channel<br>Daybeacon 1              | IMPCHA      | 18587 | D13-0479-04 | 18/04 |  |
| 9205  | Haynes Inlet Channel<br>Daybeacon 5              | IMPCHA      | 18587 | D13-0480-04 | 18/04 |  |
| 9210  | Haynes Inlet Channel<br>Daybeacon 7              | IMPCHA      | 18587 | D13-0481-04 | 18/04 |  |
| 16795 | ACOE Shilshole Bay South<br>Lighted Mooring Buoy | EXT         | 18441 | D13-0416-04 | 17/04 |  |
| 16847 | Elliott Bay Fish Haven Buoy A                    | MISS        | 18449 | D13-0467-04 | 18/04 |  |
| 16848 | Elliott Bay Fish Haven Buoy B                    | MISS        | 18449 | D13-0466-04 | 18/04 |  |
| 16885 | Georgetown Reach Range<br>Rear Light             | IMPCHA      | 18449 | D13-0487-04 | 18/04 |  |
| 16900 | Alaska Hydro-Train Light A                       | EXT         | 18449 | D13-0468-04 | 18/04 |  |
| 17129 | St Paul Waterway Buoy 2                          | MISS        | 18448 | D13-0477-04 | 18/04 |  |
| 17145 | Blair Waterway Lighted Buoy                      | TEMP DISCON | 18448 | D13-0484-04 | 18/04 |  |
| 17160 | Blair Terminal Light B                           | EXT         | 18448 | D13-0459-04 | 18/04 |  |
| 17207 | Hylebos Waterway Mooring<br>Buoys (2)            | MISS        | 18448 | D13-0457-04 | 18/04 |  |
| 19755 | Pearl Island Dock Light                          | EXT         | 18421 | D13-0448-04 | 18/04 |  |

#### DISCREPANCIES (PRIVATE AIDS) CORRECTED

| LLNR    | Aid Name                      | Status         | Chart No | BNM Ref.    | LNLM St | LNLM End |
|---------|-------------------------------|----------------|----------|-------------|---------|----------|
| 16838   | Elliott Bay Marina Breakwater | LWP<br>Light A | 18449    | D13-0507-04 | 18/04   | 19/04    |
| 16838.3 | Elliott Bay Marina Breakwater | LWP<br>Light D | 18449    | D13-0506-04 | 18/04   | 19/04    |

### SECTION III – TEMPORARY CHANGES and TEMPORARY CHANGES CORRECTED

This section contains temporary changes and corrections to Aids to Navigation for this edition. When charted aids are temporarily relocated for dredging, testing, evaluation, or marking an obstruction, a temporary correction shall be listed in Section IV giving the new position.

#### TEMPORARY CHANGES

| LLNR  | Aid Name                     | Status      | Chart No | BNM Ref.    | LNLM St | LNLM End |
|-------|------------------------------|-------------|----------|-------------|---------|----------|
| 16856 | Coast Guard Pier Light North | TEMP DISCON | 18449    | D13-0729-03 | 26/03   |          |
| 16857 | Coast Guard Pier Light South | TEMP DISCON | 18449    | D13-0729-03 | 26/03   |          |

#### TEMPORARY CHANGES CORRECTED

| LLNR | Aid Name | Status | Chart No | BNM Ref. | LNLM St | LNLM End |
|------|----------|--------|----------|----------|---------|----------|
| None |          |        |          |          |         |          |

## SECTION IV – CHART CORRECTIONS

This section contains corrections to federally and privately maintained Aids to Navigation, as well as NOS corrections.

This section contains corrective actions affecting chart(s). Corrections appear numerically by chart number, and pertain to that chart only. It is up to the mariner to decide which Chart(s) are to be corrected. The following example explains the individual elements of a typical chart correction.

| Chart Number<br>↓   | Chart Edition<br>↓  | Edition Date<br>↓ | Last Local Notice to Mariners<br>↓ | Horizontal Datum Reference<br>↓ | Source of Correction<br>↓ | Current Local Notice to Mariner<br>↓ |
|---|---------------------|-------------------|------------------------------------|---------------------------------|---------------------------|--------------------------------------|
| 18427   | 20 <sup>TH</sup> ed | 3/18/2000         | Last LNM 25/99                     | NAD 83                          | (NOS Silver Spring)       | 40/99                                |
| <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div> <p>Chart Title: WA – ANACORTES TO SKAGIT BAY -<br/>(Temp)</p> <p>Add</p> </div> <div> <p>Ben Ure Island Light 2, Fl R 4s, 25ft 4M</p> <p>at</p> </div> <div> <p>48°24'12.1"N</p> </div> <div> <p>124°37'42.0"W</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>↑</p> <p>Corrective<br/>Action</p> </div> <div style="text-align: center;"> <p>↑</p> <p>Object of Correction<br/>Action</p> </div> <div style="text-align: center;"> <p>↑</p> <p>Position</p> </div> </div> |                     |                   |                                    |                                 |                           |                                      |

(Temp) indicates that the chart correction action is temporary in nature. Courses and bearings are given in degrees clockwise from 000 true. Bearings of light sectors are toward the light from seaward. The nominal range of lights is expressed in nautical miles (NM) unless otherwise noted.

**18423    34th ed    Dec 2003    Last LNM 17/04    NAD 83    (CCGD 13)    19/04**  
**Chart Title: WA - BELLINGHAM TO EVERETT INCLUDING SAN JUAN ISLANDS**

|     |   |    |             |              |
|-----|---|----|-------------|--------------|
| Add | Outfall Pipe Lighted Buoy A Fl Y 10s Priv | at | 48-00-15.2N | 122-10-38.3W |
| Add | Outfall Pipe Lighted Buoy B Fl Y 10s Priv | at | 47-59-28.2N | 122-10-38.3W |

**18440    27th ed    Nov 2003    Last LNM 17/04    NAD 83    (CCGD 13)    19/04**  
**Chart Title: WA - PUGET SOUND**

|     |   |    |             |              |
|-----|---|----|-------------|--------------|
| Add | Outfall Pipe Lighted Buoy A Fl Y 10s Priv | at | 48-00-15.2N | 122-10-38.3W |
| Add | Outfall Pipe Lighted Buoy B Fl Y 10s Priv | at | 47-59-28.2N | 122-10-38.3W |

**18441    43rd ed    Jul 2003    Last LNM 18/04    NAD 83    (CCGD 13)    19/04**  
**Chart Title: WA - PUGET SOUND - NORTHERN PART**

|     |   |    |             |              |
|-----|---|----|-------------|--------------|
| Add | Outfall Pipe Lighted Buoy A Fl Y 10s Priv | at | 48-00-15.2N | 122-10-38.3W |
| Add | Outfall Pipe Lighted Buoy B Fl Y 10s Priv | at | 47-59-28.2N | 122-10-38.3W |

**18443    16th ed    Jan 2004    Last LNM 04/04    NAD 83    (CCGD 13)    19/04**  
**Chart Title: WA - APPROACHES TO EVERETT**

|     |   |    |             |              |
|-----|---|----|-------------|--------------|
| Add | Outfall Pipe Lighted Buoy A Fl Y 10s Priv | at | 48-00-15.2N | 122-10-38.3W |
| Add | Outfall Pipe Lighted Buoy B Fl Y 10s Priv | at | 47-59-28.2N | 122-10-38.3W |

**18444    15th ed    07 Apr 2001    Last LNM 02/04    NAD 83    (CCGD 13)    19/04**  
**Chart Title: WA - EVERETT HARBOR**

|     |   |    |             |              |
|-----|---|----|-------------|--------------|
| Add | Outfall Pipe Lighted Buoy A Fl Y 10s Priv | at | 48-00-15.2N | 122-10-38.3W |
| Add | Outfall Pipe Lighted Buoy B Fl Y 10s Priv | at | 47-59-28.2N | 122-10-38.3W |

**18447    27th ed    Apr 2004    Last LNM 13/04    NAD 83    (NOS silver Springs)    19/04**  
**New Edition**

**Chart Title: WA - LAKE WASHINGTON SHIP CANAL AND LAKE WASHINGTON**    1 : 25,000  
 (New edition due to various general changes.)  
 This NOAA chart is now available in both the Print-on Demand and digital raster formats. See <http://chartmaker.ncd.noaa.gov/mcd/dole.htm> for details. The corresponding traditional paper chart will be available in two to eight weeks.

**18502    84th ed    01 Jun 2002    Last LNM 18/04    NAD 83    (CCGD 13)    19/04**  
**Chart Title: WA - GRAYS HARBOR**

|          |  |    |             |              |
|----------|--|----|-------------|--------------|
| Relocate | North Channel Range F Front Light (46-58-11.0N 123-55-44.0W) | to | 46-58-11.6N | 123-55-54.3W |
| Relocate | North Channel Range F Rear Light (46-58-11.7N 123-55-57.1W)  | to | 46-58-12.1N | 123-56-10.2W |

**18523    54th ed    Oct 2003    Last LNM 16/04    NAD 83    (CCGD 13)    19/04**  
**Chart Title: OR - WA - COLUMBIA RIVER - HARRINGTON POINT TO CRIMS ISLAND**

|          |  |    |             |              |
|----------|--|----|-------------|--------------|
| Relocate | Price Island Light 35 (46-15-16.2N 123-26-40.1W) | to | 46-15-16.3N | 123-26-40.2W |
|----------|--|----|-------------|--------------|

**18525    34th ed    May 2004    Last LNM 16/04    NAD 83    (NOS Silver Springs)    19/04**  
**New Edition**

**Chart Title: OR - WA - COLUMBIA RIVER - SAINT HELENS TO VANCOUVER**    1 : 40,000  
 (New edition due to numerous Notice to Mariner changes.)  
 This NOAA chart is now available in both the Print-on Demand and digital raster formats. See <http://chartmaker.ncd.noaa.gov/mcd/dole.htm> for details. The corresponding traditional paper chart will be available in two to eight weeks.

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### OIL RIG MOVEMENT

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| Drill Rigs/Vessels Removed |           |       |             |       |      |        |
|----------------------------|-----------|-------|-------------|-------|------|--------|
| Latitude                   | Longitude | Block | Rigs/Vessel | Chart | Type | Status |
| None                       |           |       |             |       |      |        |

  

| Drill Rigs/Vessels Established |           |       |             |       |      |        |
|--------------------------------|-----------|-------|-------------|-------|------|--------|
| Latitude                       | Longitude | Block | Rigs/Vessel | Chart | Type | Status |
| None                           |           |       |             |       |      |        |

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### SECTION V - ADVANCE NOTICES

This section contains advance notice of approved projects, changes to aids to navigation, or upcoming temporary changes such as dredging, etc. Mariners are advised to use caution while transiting these areas.

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### SUMMARY OF ADVANCED APPROVED PROJECTS

| <u>Waterway</u> | <u>Project Date</u> | <u>Ref. LNM</u> |
|-----------------|---------------------|-----------------|
| None            |                     |                 |

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### SECTION VI - PROPOSED CHANGES

Periodically, the Coast Guard evaluates its system of aids to navigation to determine whether the conditions for which the aids to navigation were established have changed. When changes occur, the feasibility of improving, relocating, replacing, or discontinuing aids are considered. This section contains notice(s) of non-approved, proposed projects open for comment. SPECIAL NOTE: Mariners are requested to respond in writing to the District office Attn John Barberi (206) 220-7276 unless otherwise noted (see banner page for address).

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### PROPOSED WATERWAY PROJECTS OPEN FOR PUBLIC COMMENT

| <u>Waterway</u>                                       | <u>Closing</u> | <u>Docket No.</u> | <u>Ref. LNM</u> |
|---|----------------|-------------------|-----------------|
| WASHINGTON – PUGET SOUND – NORTHERN PART – HOOD CANAL | 14 May 2004    |                   | LNM: 15/04      |

Navigation Aids: To improve range performance.

Change Port Gamble Range Front Light (LLNR 17735) and Port Gamble Range Rear Light (LLNR 17740) to visible 1.5 degrees each side of range line and change the color from white to green.

Navigation Aids: To properly align the waterway.

Change Port Gamble Light 1 (LLNR 17745) to Port Gamble Light 3 (LLNR 17745).

Navigation Aids: To properly align the waterway.

Change Port Gamble Inner Light 3 (LLNR 17750) to Port Gamble Light 5 (LLNR 17750).

Navigation Aids: Establish new Light.

Establish Port Gamble Light 1 (LLNR 17743) showing a flashing green light every 2.5 seconds (FL G 2.5s) and square shaped green dayboards, in approximate position 47 52 48N, 122 34 42W (on same structure as Port Gamble Range Front Light), with a nominal range of 4 nautical miles.

Charts 18445, 18473, 18476, 18477

| <u>Waterway</u>                                     | <u>Closing</u> | <u>Docket No.</u> | <u>Ref. LNM</u> |
|---|----------------|-------------------|-----------------|
| COLUMBIA RIVER – JOHN DAY DAM TO BLALOCK – JOHN DAY | 14 May 2004    |                   | LNM: 15/04      |

Navigation Aids: To improve range performance and to accommodate solarization of the lights.

Change John Day Range Front and Rear Lights (LLNR 12375/12380) from visible 2 degrees each side of rangeline to visible 5.5 degrees each side of rangeline.

Chart 18535

| <u>Waterway</u>   | <u>Closing</u> | <u>Docket No.</u> | <u>Ref. LNM</u> |
|---|----------------|-------------------|-----------------|
| COLUMBIA RIVER – HARRINGTON POINT TO CRIMS ISLAND – WAUNA | 14 May 2004    |                   | LNM: 15/04      |

Navigation Aids: To improve range performance.

Change Wauna Range Rear Light (LLNR 10435) from visible 4 degrees each side of rangeline to visible 14 degrees each side of rangeline.

Chart 18523

| <u>Waterway</u>   | <u>Closing</u> | <u>Docket No.</u> | <u>Ref. LNM</u> |
|---|----------------|-------------------|-----------------|
| OREGON – CAPE SEBASTIAN TO HUMBUG MOUNTAIN – COQUILLE RIVER | 14 May 2004    |                   | LNM: 15/04      |

Navigation Aids: To improve range performance.

Change Coquille River Entrance Range Front Light (LLNR 8690) from visible 4 degrees each side of rangeline to visible 10 degrees each side of rangeline.

Change Coquille River Entrance Range Rear Light (LLNR 8695) from visible 4 degrees each side of rangeline to visible 14 degrees each side of rangeline.

Chart 18588

| <u>Waterway</u>  | <u>Closing</u> | <u>Docket No.</u> | <u>Ref. LNM</u> |
|--|----------------|-------------------|-----------------|
| COLUMBIA RIVER – PACIFIC OCEAN TO HARRINGTON POINT -<br>BAKER BAY WEST CHANNEL | 14 May 2004    |                   | LNM: 15/04      |

Navigation Aids: To mark a charted rock.

Establish Baker Bay West Channel Buoy 6A (LLNR 14432), a red nun in approximate position 46-16-27.0N, 124-01-51.0W.

Chart 18521

| <u>Waterway</u>   | <u>Closing</u> | <u>Docket No.</u> | <u>Ref. LNM</u> |
|---|----------------|-------------------|-----------------|
| OREGON – CAPE BLANCO TO YAQUINA HEAD –<br>CAPE ARAGO LIGHT (LLNR 605) | 28 May 2004    |                   | LNM: 17/04      |

Navigation Aids: Not considered necessary for safe navigation.

On 15 October 2004, permanently discontinue the seasonal fog signal (maintained from April 15 to Oct 15 each year).

Charts 18580, 18587

| <u>Waterway</u>                     | <u>Closing</u> | <u>Docket No.</u> | <u>Ref. LNM</u> |
|-------------------------------------|----------------|-------------------|-----------------|
| SNAKE RIVER – LITTLE GOSE RESERVOIR | 28 May 2004    |                   | LNM: 17/04      |

Navigation Aids: To better mark shoal water.

Relocate Little Goose Reservoir Buoy 28A (LLNR 13833) to approximate position 46-40-45N, 117-33-07W

Chart 18547

| <u>Waterway</u>              | <u>Closing</u> | <u>Docket No.</u> | <u>Ref. LNM</u> |
|------------------------------|----------------|-------------------|-----------------|
| SNAKE RIVER – LAKE SACAJAWEA | 28 May 2004    |                   | LNM: 17/04      |

Navigation Aids: To better mark shoal water.

Relocate Lake Sacajawea Buoy 28 (LLNR 13355) to approximate position 46-24-16N, 118-39-12W.

Relocate Lake Sacajawea Buoy 34 (LLNR 13380) to approximate position 46-26-11N, 118-38-24W.

Relocate Lake Sacajawea Buoy 38 (LLNR 13390) to approximate position 46-26-36N, 118-38-23W.

Chart 18545

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## SECTION VII - GENERAL

This section contains information of general concern to the Mariners. Mariners are advised to use caution while transiting these areas.

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### OREGON - Bridge Information

#### Coquille River

The Bullard Ferry Bridge at Coquille River mile 3.5 has been disabled and cannot open for vessel traffic until repairs are made.

Chart 18588

LNM: 12/04

### OREGON - Bridge Information (Revisions of LNM 04/04)

#### Willamette River

The Broadway Bridge at mile 11.7 will require 24 hour notification for openings from 27 Feb to 15 Nov 04 due to operations related to painting. Additionally the draw need not open for passage of vessels beginning 0700 the first day until 2300 local on the last day of the following dates: from 08 to 13 May 04.

Chart 18526

LNM: 09/04



## **OREGON - Bridge Information**

### **Willamette River**

The Burnside Bridge at mile 12.4 need not open for the passage of vessels from 0630 to 0930 local on 18 Jul and from 0700 to 1100 local on 19 Sep 04, to accommodate public events.

Chart 18526

LNM: 14/04

## **OREGON - Bridge Information**

### **Willamette River**

The Hawthorn Bridge at mile 13.1 need not open for the passage of vessels from 0730 to 0830 local on 11 Jul 04, to accommodate a public event.

Chart 18526

LNM: 14/04

## **OREGON - Bridge Information**

### **Coos Bay**

The Coos Bay Railroad Bridge, at mile 9.0, swing span has a mechanical failure and can only be opened by tug. Mariners should provide as much notice as possible for openings until a broken drive shaft is repaired. The bridge operator monitors VHF-FM Channel 18A when bridge is in operation. The bridge operator can also be reached at (541) 912-8691.

Chart 18587

LNM: 34/03

## **COLUMBIA RIVER – Bridge Information**

### **Vancouver**

The dual liftspans of the Interstate 5 dual vertical lift bridges at river mile 106.5 will be effected throughout the summer of 2004 by a major mechanical-electrical rehabilitation project. From 0900 01 Jul to 0630 local 15 Jul 04 the draws need not open for the passage of vessels unless two hours notice is provided. From 0630 15 Jul to 2100 local on 06 Aug 04 the draws will not open. Scheduled openings will occur, if requested, at 2100 local on 06 and 20 Aug, 03 and 17 Sep and 01 Oct 04. The draws will not return to normal operations until 2100 local on 15 Oct 04.

Charts 18524, 18526

LNM: 12/04

## **COLUMBIA RIVER - SNAKE RIVER - Bridge Information (Revisions of LNM 12/04)**

### **Longview**

A single work platform will remain installed 250 ft south of the center of the main span of the Lewis and Clark Bridge at river mile 66 until 31 May 04. This platform is about 20 ft wide with 8 ft less vertical clearance found beneath it.

Chart 18524

LNM: 18/04

## **WASHINGTON - Bridge Information**

### **Duwamish West Waterway**

The Spokane Street Dual Swingspan at mile 0.3 – Vessel operators who need draw openings are requested to pass through a west span opening whenever safe passage through this half-opening is possible. The Coast Guard recognizes this limited operation for consenting vessels only. Cracking has been discovered in the vertical lift cylinder of the east span. The manufacture and replacement of this unique part will take months. Minimizing the load bearing of the cylinder may prevent a failure of the east span similar to the one that occurred in 2001 at the west span. Operators will continue to open both sides of the bridge to any vessel that requests a full opening.

Chart 18450

LNM: 11/02

## **WASHINGTON – Bridge Information**

### **Lake Washington**

The Montlake Bridge draw need not open for the passage of vessels from 0730 to 0900 local 23 May 04, to accommodate the annual Nordstrom Beat the Bridge Run.

Chart 18447

LNM: 19/04

## **WASHINGTON – Bridge Information**

### **Lake Washington**

The Montlake Bridge draw need not open for the passage of vessels from 1130 to 1400 and from 1630 to 1800 local 12 Jun 04, to accommodate heavy traffic for the University of Washington Commencement.

Chart 18447

LNM: 19/04

## **WASHINGTON – Bridge Information**

### **Lake Washington**

The University Bridge draw need not open for the passage of vessels from 0815 to 0930 local 23 May 04, to accommodate the annual Nordstrom Beat the Bridge Run.

Chart 18447

LNM: 19/04

## **WASHINGTON – Bridge Information**

### **Chambers Creek**

The Burlington Northern Santa Fe Railroad Drawbridge near Steilacoom need not open for the passage of vessels from 0700 local 18 May to 2000 local 19 May and from 0700 local 25 May to 2000 local 26 May 04, during maintenance.

Chart 18445

LNM: 19/04

## WASHINGTON - Bridge Information

Tacoma Narrows Bridge – (Revision of LNM 31/03)

Construction – Derrick barges will be deployed at various locations around the pier locations for the new parallel bridge near the piers of the existing Tacoma Narrows Bridge. Buoys have been deployed to mark anchor cables for retrieval this summer when caissons are floated into position for the new footing excavation. These buoys are in the process of being lighted and repainted for improved visibility. Lights may be extinguished by submersion in strong currents. A free channel 1600 feet wide currently exists. Mariners should exercise caution while passing construction activity. Further updates will be included in this publication.

Charts 18448, 18474

LNM: 32/03

## WASHINGTON - Bridge Information

Tacoma Narrows Bridge – (Revision of LNM 32/03)

The Coast Guard has issued a safety zone regulation until 06 Aug 04, for all waters of the Tacoma Narrows, Puget Sound, and adjoining waters of Washington state, within a 250 yard radius around each of the following coordinates: 47-15-54N 122-32-50W and 47-16-15N 122-33-16W. No vessel will be allowed to transit this area without the permission of the Coast Guard. The Coast Guard may be reached on VHF-FM Channel 16.

Charts 18448, 18474

LNM: 06/04

## WASHINGTON - Bridge Information

Everett

State Route 529 Swingspan Bridge across Steamboat Slough at Everett is inoperable due to mechanical failure until further notice.

Chart 18443

LNM: 36/03

## Bridge Lighting Discrepancies:

Lights on the following bridges have been reported extinguished.

| Waterway and Mile         | Bridge Name              | Location     | Status | Date reported | BNM     | LNM   |
|---------------------------|--------------------------|--------------|--------|---------------|---------|-------|
| Columbia River Mile 66    | Lewis and Clark Bridge   | Longview WA  | EXT    | 11 May 04     | 0505-04 | 19/04 |
| Coos Bay Mile 9           | Coos Bay Railroad Bridge | Coos Bay OR  | EXT    | 30 Apr 04     | 0454-04 | 18/04 |
| Coos Bay Mile 9.8         | McCullough Bridge        | Coos Bay OR  | EXT    | 30 Apr 04     | 0455-04 | 18/04 |
| Duwamish Mile 3.8         | South Park Bridge        | Seattle WA   | EXT    | 03 May 04     | 0469-04 | 18/04 |
| Port Orchard              | Warren Ave Bridge        | Bremerton WA | EXT    | 05 May 04     | 0491-04 | 19/04 |
| Chambers Creek Mile 0.0   | Chambers Creek Bridge    | Seattle WA   | EXT    | 05 May 04     | 0490-04 | 19/04 |
| Hylebos Waterway Mile 1.1 | East 11th Street Bridge  | Seattle WA   | EXT    | 05 May 04     | 0489-04 | 19/04 |

## Bridge Lighting Discrepancies Corrected:

The following bridge discrepancies have been corrected since the last Local Notice to Mariners:

| Waterway and Mile | Bridge Name           | Location   | Status | Date reported | BNM     | LNM   |
|-------------------|-----------------------|------------|--------|---------------|---------|-------|
| Duwamish Mile 0.3 | Spokane Street Bridge | Seattle WA | EXT    | 03 May 04     | 0495-04 | 19/04 |

## THIRTEENTH COAST GUARD DISTRICT - SPECIAL NOTICE - INTERNET DELIVERY OF LOCAL NOTICES TO MARINERS

To improve service and reduce costs, the U.S. Coast Guard is moving to issuance of the Local Notices to Mariners (LNM) exclusively via the Internet. Recently, we revised our Aids to Navigation (AtoN) Manual (COMDTINST M16500.7) to authorize elimination of printed LNM. Effective April 1, 2004, the U.S. Coast Guard will no longer print and mail copies of each LNM. A Notice concerning implementation of Internet delivery of LNM was published in the Federal Register on March 2, 2004. The notice can be accessed at <http://frwebgate4.access.gpo.gov/cgi-bin/waisgate.cgi?WAIISdocID=2414666728+3+0+0&WAIISaction=retrieve>.

The electronic versions of LNM appear on the U.S. Coast Guard Navigation Center's Website at <http://www.navcen.uscg.gov/lnm/default.htm>.

For many years, each U.S. Coast Guard district has printed and mailed the LNM free of charge to any mariner requesting a subscription. The LNM provides important safety information; however, the cost of printing and mailing has become prohibitive. Technology now allows us to provide the LNM in a timelier and less costly manner via the Internet. All individuals are encouraged to register for List Server notification on the Navigation Center's Website, so when LNM's are posted for the district(s) in which you are interested, you will receive automatic notification of their availability.

Internet delivery of the LNM is part of a much larger U.S. Coast Guard effort to integrate, improve, and streamline the collection and dissemination of all navigation safety information.

Chart N/A

LNM: 09/04

## THIRTEENTH COAST GUARD DISTRICT - Request for information on the use of large-scale driftnets on the high seas

The United States Coast Guard (USCG) requests mariners be on the lookout for and report any observed driftnets or vessels engaged in driftnet fishing on the high seas (more than 200NM from shore). Sighting information may be made to any of the following Coast Guard offices:

| Offices                         | Phone                            | Fax            | Telex     | Email  |
|---------------------------------|----------------------------------|----------------|-----------|--|
| USCG Pacific Area Alameda, CA   | 1-800-246-7236<br>1-510-437-3701 | 1-510-437-3017 | 230172343 | <a href="mailto:OD11/Pacarea@d11.uscg.mil">OD11/Pacarea@d11.uscg.mil</a>         |
| USCG 14th District Honolulu, HI | 1-800-331-6176<br>1-808-541-2500 | 1-808-541-2123 |           | <a href="mailto:D14ccdutyofficer@D14.uscg.mil">D14ccdutyofficer@D14.uscg.mil</a> |
| USCG 17th District Juneau, AK   | 1-800-478-5555<br>1-907-463-2000 | 1-907-463-2023 | 49615066  | <a href="mailto:D17-cc@cgalaska.uscg.mil">D17-cc@cgalaska.uscg.mil</a>           |

Illegal high seas driftnet (HSDN) fishing has historically been conducted in the Northwest Pacific Ocean. Mariners following great circle routes between North America and Asia are most likely to encounter this activity. Fishing activity normally takes place between 01 Apr and 31 Aug. However, illegal activity may occur in other areas and at other times of the year.

Information desired include date, time, position, description of gear/vessel, and observed activity. Video or photographs are highly desired.

#### HSDN Fishing Vessel Characteristics:

HSDN fishing vessels typically range from 120 to 200 feet in length and are usually in fair to poor condition. Distinguishing characteristics include:

Net tube: A large, usually white tube, which extends from the working deck to the net bin located aft. This tube is about two feet in diameter, runs along the port or starboard side of the superstructure, and is clearly visible from both the surface and air.

Net bin: A structure normally located on an aft deck in which the nets are stored.

Net spreader: A triangular or roller net spreading device, which prevents the net from becoming entangled as it enters the water. While only visible from the stern, this is one characteristic, which clearly distinguishes a HSDN fishing vessel from a longline or other fishing vessel.

Transponders: The radio transponders are approximately 4-6 ft tall, are used to mark the end of a net and are normally stored in racks on the weather decks.

When the net is in the water, it is normally suspended using cylindrical floats spaced every few feet, similar to swimming pool lane markers, with the ends of the nets marked with radio transponders. Other types of floats may be used, including larger spherical floats about 2-3 ft in diameter. The driftnets may vary from a couple hundred yards to several nautical miles in length.

Chart N/A

LNM: 09/04

#### THIRTEENTH COAST GUARD DISTRICT - Reporting suspicious activity

The Department of Homeland Security (DHS) encourages the maritime public to report information concerning suspicious activity to the National Response Center (NRC) at (800) 424-8802. The U.S. Coast Guard reminds the maritime industry that they may also report information concerning activity to their Local Federal Bureau of Investigation (FBI) Joint Terrorism Task Force (JTTF) Office, <http://www.fbi.gov/contact/fo/fo.htm>, or to other appropriate authorities. Individuals can contact the DHS Watch and Warning Unit at (202) 323-3205, toll free at (888) 585-9078, or by e-mail to [nipc.watch@fbi.gov](mailto:nipc.watch@fbi.gov).

Chart N/A

LNM: 15/03

#### COLUMBIA RIVER - ASTORIA - Construction Projects (Revision of LNM 45/02)

Marine construction activities are scheduled near Astoria on the Oregon side of the Columbia River at the Port of Astoria's Pier III near river mile 11. This is a long-term project that is expected to last until 2005. Mariners should use caution near the 1100-foot pier as piles may not be visible at high tide. For questions concerning the long-term Pier III project contact the Port of Astoria at (503) 325- 4521.

Chart 18521

LNM: 35/03

#### COLUMBIA AND SNAKE RIVERS - 2003 Winter Seasonal Lockage Schedule for Recreational Craft (revision to LNM 19/03)

The U.S. Army Corps of Engineers, Walla Walla and Portland Districts, have implemented the 2003 winter seasonal lockage schedule until 15 May 04 for the passage of recreational craft through the following navigation locks:

| Walla Walla District Locks |                         |       | Portland District Locks |                         |       |
|----------------------------|-------------------------|-------|-------------------------|-------------------------|-------|
| Navigation Lock            | Location                | Chart | Navigation Lock         | Location                | Chart |
| McNary Dam                 | Columbia River Mile 292 | 18539 | Bonneville Dam          | Columbia River Mile 145 | 18531 |
| Ice Harbor Dam             | Snake River Mile 9.7    | 18545 | The Dalles Dam          | Columbia River Mile 191 | 18533 |
| Lower Monumental Dam       | Snake River Mile 41.6   | 18545 | John Day Dam            | Columbia River Mile 216 | 18535 |
| Little Goose Dam           | Snake River Mile 70.3   | 18546 |                         |                         |       |
| Lower Granite Dam          | Snake River Mile 107.3  | 18548 |                         |                         |       |

When a recreational vessel lockage schedule is in effect, recreational vessels will only be allowed to lock through at the times designated for such lockages and they will take precedence over commercial vessels. Commercial vessels will continue to be locked through upon arrival except during the times specified for recreational vessel lockages. At the discretion of the lock operator, recreational vessels may be allowed to lock through with commercial craft. All vessel owner/operators lock through at their own risk. Follow the directions of the lock operator when using the locks or operating in the vicinity of the locks. The lock operator has the final authority on the suitability of a craft for lockage. Refer to the U.S. Army Corps of Engineers Safe Lockage Policy for Recreational Craft on the Columbia and Snake River for additional safety requirements. For additional information on this matter or copies of the Safe Lockage policy, visit the following website: <http://www.nwp.usace.army.mil/op/s/nl> or contact the Walla Walla District at (509) 527-7115/(509) 527-7113 or the Portland District at (503) 808-4332/(503) 808-4333.

The three Portland District Locks and the five Walla Walla District Locks will use the same lockage schedule making the lockage times for the entire Columbia/Snake River system identical for recreational vessels. The following seasonal recreational craft lockage schedule will be implemented beginning 16 September 2003:

| Traffic Direction   |           |            |           |
|---------------------|-----------|------------|-----------|
| Upstream Lockages   | 8:00 a.m. | 11:00 p.m. | 3:00 p.m. |
| Downstream Lockages | 8:30 a.m. | 11:30 p.m. | 3:30 p.m. |

Consideration will be given for special lockages to flotillas or other unique events sponsored by yacht clubs, marinas, and other groups, provided advance (24 hours) arrangements have been made with the appropriate operations manager or their appointed representative. The following project office and operations manager should be contacted for scheduling of special lockages:

| Project               | Operations Managers    | Phone Number        | Alternate Number    |
|-----------------------|------------------------|---------------------|---------------------|
| Bonneville            | Chief Operator on Duty | (541) 374-8323      | N/A                 |
| The Dalles            | Chief Operator on Duty | (541) 298-4007      | N/A                 |
| John Day              | Chief Operator on Duty | (541) 298-9712      | N/A                 |
| McNary                | David Coleman          | (541) 922-2251      | (541) 922-3214      |
| Ice Harbor            | Scott Sutliff          | (509) 543-3256      | (509) 547-7783      |
| Lower Monumental      | Matt Allen             | (509) 282-7353      | (509) 282-3218      |
| Little Goose Project  | Scott Ross             | (509) 399-2233 x253 | (509) 399-2233 x231 |
| Lower Granite Project | Martin Mendiola        | (509) 843-1493 x258 | (509) 843-1493 x231 |

Chart N/A

LNM: 35/03

#### **COLUMBIA RIVER - BONNEVILLE, THE DALLES, AND JOHN DAY DAMS - Closures (Revision of LNM 04/04)**

The John Day Navigational Locks will be closed for 12 hours daily, excluding Sundays from 0800 to 2000 local from 28 Apr to 05 Jun 04. For additional information, contact ACOE Portland District at (503) 808-4333.

Charts 18531, 18533, 18535

LNM: 17/04

#### **COLUMBIA RIVER - LAKE UMATILLA - BLALOCK ISLAND - Fish and Wildlife Fires**

The U.S. Fish and Wildlife Services will be conducting prescribed fires in the vicinity of 45-54-20N 119-37-57W. The fires will be conducted from 1100 local until dusk on various dates until the end of May 04. Mariners are urged to transit the area with caution as smoke may cause low visibility. For additional information, contact U.S. Fish and Wildlife Service Mid Columbia River NWRC at (509) 545-8588.

Chart 18539

LNM: 08/04

#### **OREGON / WASHINGTON - COASTAL REGION - Tsunami Reporting System**

As part of the Pacific Tsunami Reporting System the following surface buoys have been deployed by NOAA. Each buoy is a 2.5-meter disk, red and white in color, with the word "TSUNAMI" on it. Each buoy has a "FL Y 4s" light.

|              |                       |
|--------------|-----------------------|
| Buoy 46404   | 45-51-32N, 128-46-40W |
| Buoy 46405   | 42-54-10N, 130-54-32W |
| Buoy D - 127 | 45-31-26N, 127-35-38W |

Chart 501

LNM: 29/03

#### **OREGON / WASHINGTON - COASTAL REGION - NOAA**

NOAA buoys 46404 and 46405 have been temporarily discontinued.

Chart 501

LNM: 14/04

#### **WASHINGTON - ELLIOTT BAY - Terminal 46 Construction**

The American Construction Company has commenced construction that includes pile driving at terminal 46 for the Port of Seattle. Pile driving work will be from 0700 to 1700 local Monday through Saturday 12 Dec 03 to Jun 04. The crane DB Palouse will be moored on anchors, and crown buoys will be used to mark the anchor locations. DB Palouse will monitor VHF-FM Channel 16. All vessels are requested to minimize wake in the vicinity of construction. For additional information contact the American Construction Co at (206) 264-0701.

Chart 18449

LNM: 50/03

#### **WASHINGTON - STRAIT OF JUAN DE FUCA - PUGET SOUND - Security Zone of Passenger Vessels (Revision to LNM 06/03)**

The Coast Guard is establishing a temporary moving security zone of 500 yards surrounding passenger vessels while within the waters of Puget Sound and adjacent waters. A passenger vessel is defined as any vessel over 100 feet in length (33 meters) carrying passengers for hire such as auto ferries, cruise ships, passenger ferries, and excursion vessels. All vessels within 500 yards of a passenger vessel shall operate at the minimum speed necessary to maintain a safe course and shall proceed as directed by the Official Patrol or passenger vessel master. The Official Patrol will consist of a Coast Guard patrol, Federal Law Enforcement officer or a General Authority Washington Peace Officer, Limited Authority Washington Peace Officer, Specially Commissioned Washington Peace Officer, or the passenger vessel master. This order is issued under the authority of the Ports and Waterways Safety Act, Title 33, U. S. Code 1221 et. Seq., and the regulations issued thereunder, Title 33, Code of Federal Regulations Part 165.

Physical Boundaries: The following area is a security zone: All waters of Puget Sound, Washington State east of 123-30-00W [Datum: NAD 1983] within a 500 yard radius centered on passenger vessels while they are underway, anchored or moored.

Special Rules: All vessels within 500 yards of a passenger vessel shall operate at the minimum speed necessary to maintain a safe course, and shall proceed as directed by the Official Patrol or the passenger vessel master. No vessels will be allowed to transit this area without the permission of the Coast Guard, the Official Patrol or the passenger vessel master. Penalties for violating the zone: The Ports and Waterways Safety Act prescribes that whoever violates an order issued under the act is liable to a civil penalty of not more than \$27,500 for each violation. Each day of continuing violation shall constitute a separate violation. If such a violation is willful, you are subject to a criminal penalty of not more than \$250,000 and/or six years imprisonment. This criminal penalty is classified as a class "D" felony under federal law. Contact the Coast Guard Marine Safety Office, Puget Sound at (206) 217-6215 or VHF-FM Channel 16 for more information.

Chart N/A

LNM: 32/03

#### **WASHINGTON - PUGET SOUND - SEATTLE TO BREMERTON - Ongoing Construction of Pier 36**

During ongoing construction at Pier 36 that is expected to be completed September 2005, barges will be moored on the western face of Pier 36 sporadically. Barges will be marked with white flashing lights on the west corners and extend off the face no more than 110 ft. Mariners are requested to exercise caution in the vicinity of Pier 36.

Chart 18449

LNM: 33/03

#### WASHINGTON - COMMENCEMENT BAY - Tacoma - Construction Operations

An inter-tidal basin has been excavated in approximate position 47-18-23N 122-30-32W. This is part of a construction activity completed at the Asarco Tacoma Smelter Facility of the Commencement Bay Nearshore/ Tideflats Superfund Site Operable Unit 02 (commonly known as the "slag pile"). The dimensions of the basin are approximately 600 ft long (parallel to the shoreline) by 200 ft wide (perpendicular to the shoreline). A rock breakwater with a crest elevation of +10 ft MLLW is located at the seaward edge of the basin. Mariners are urged to use caution when transiting this area as the breakwater is not visible at all tidal conditions.  
Chart 18448 LNM: 39/03

#### WASHINGTON - STRAIT OF JUAN DE FUCA ENTRANCE - Exposed Submarine Cable (Revision of LNM 42/01)

25 segments of exposed or partially exposed cable have been identified in the Olympic Coast National Marine Sanctuary (OCNMS). The exposed cable locations are in the vicinity of Cape Flattery to 25 NM offshore. The exposed cables pose the greatest hazard to trawling and fishing vessels. Vessels that suspect their gear is snagged on the exposed cable should call Global Crossing at (800) 409-4471. The positions and lengths of exposed cable (see LNM 45/01 for detailed information available online at <http://www.navcen.uscg.gov/lnm/d13>) are only those identified within the OCNMS. It is likely that there are additional locations of exposed cable outside of the OCNMS. The general area of exposed cable is located within the following coordinates:

| Lat/Long                 | Lat/Long                 |
|--------------------------|--------------------------|
| 48-26-45.0N 125-21-18.0W | 48-26-45.0N 124-38-15.0W |
| 48-21-18.0N 125-21-18.0W | 48-21-18.0N 124-38-15.0W |

Chart 18480

LNM: 43/01

#### WASHINGTON - PUGET SOUND - COMMENCEMENT BAY - Piling Removal Project

A piling removal project has commenced at the NW end of the spit separation of the St. Paul and Middle Waterways in approximate position 47-16-10N 122-26-00W. The removal of these pilings may make it difficult to identify the rock pile spit that extends into the bay. Mariners are advised to exercise caution when transiting this area.

Chart 18448

LNM: 52/02

#### WASHINGTON - PUGET SOUND - DUWAMISH WATERWAY - Submerged Barge (Revision of LNM 05/03)

Six barges rather than the one barge previously reported in December 2002, have sunk in the Duwamish Waterway approximately 150 yards south of the 1<sup>st</sup> Avenue Bridge and are protruding into the west side of the channel. The owner of the partially submerged barge has marked the corner in the channel with a red float and a quick flashing red light. Attempts to salvage the barge have been unsuccessful. An announcement will appear in this publication as changes occur. Contact the Army Corps of Engineers at (206) 764-3429 for more information.

Chart 18450

LNM: 16/03

#### WASHINGTON - PUGET SOUND - Marine Events

| EVENT DATE | EVENT NAME                   | EVENT LOCATION                   | SPONSOR                       |
|------------|------------------------------|----------------------------------|-------------------------------|
| 05/11/2004 | Spring Evening- Tues Evening | Lake Washington                  | Corinthian Yacht Club         |
| 05/12/2004 | Corinthian II                | Fidalgo Bay                      | Anacortes Yacht Club          |
| 05/12/2004 | Wind Seekers Spring Evening  | Commencement Sound               | Wind Seekers Yacht Club       |
| 05/12/2004 | Interim Evening-PHRF         | Puget Sound                      | Corinthian Yacht Club         |
| 05/12/2004 | Spring Series 2              | Bellingham Bay                   | Bellingham Bay                |
| 05/12/2004 | Spring Evening- Wed Evening  | Lake Washington                  | Corinthian Yacht Club         |
| 05/13/2004 | Interim Evening-One Design   | Puget Sound                      | Corinthian Yacht Club         |
| 05/14/2004 | Pt Orchard YC May Fri Night  | Sinclair Inlet                   | Port Orchard Yacht Club       |
| 05/14/2004 | Viking Fest Annual Fireworks | Liberty Bay                      | Viking Fest Corporation       |
| 05/15/2004 | Hein Bank                    | Hein Bank                        | Anacortes Yacht Club          |
| 05/15/2004 | Viking Fest Rose City Skiers | Liberty Bay                      | Viking Fest Corporation       |
| 05/15/2004 | SBYC Opening Day             | Shelter Bay                      | Shelter Bay Yacht Club        |
| 05/15/2004 | Wind Seekers Spring Vashon   | Commencement Sound               | Wind Seekers Yacht Club       |
| 05/15/2004 | 11th Annual SOCKS Regatta    | Vicinity Shilshole Bay Marina    | Seattle Yacht Club            |
| 05/16/2004 | UW Rowing Races              | Lake Washington                  | University of Washington Crew |
| 05/16/2004 | Viking Fest Rose City Skiers | Liberty Bay                      | Viking Fest Corporation       |
| 05/16/2004 | 11th Annual SOCKS Regatta    | Vicinity Shilshole Bay Marina    | Seattle Yacht Club            |
| 05/16/2004 | SSYC Race Series             | Shilshole Marina to Point Monroe | Seattle Singles Yacht Club    |
| 05/17/2004 | Sloop Tavern Ballard Cup     | Shilshole Marina                 | Sloop Tavern Yacht Club       |
| 05/17/2004 | Ballard Cup Series 1         | Puget Sound                      | Shilshole Bay Yacht Club      |
| 05/18/2004 | Interim Evening Tues Evening | Lake Washington                  | Corinthian Yacht Club         |
| 05/19/2004 | Corinthian III               | Fidalgo Bay                      | Anacortes Yacht Club          |
| 05/19/2004 | Spring Series 3              | Bellingham Bay                   | Bellingham Bay                |
| 05/19/2004 | Wind Seekers Summer Eve A    | Commencement Sound               | Wind Seekers Yacht Club       |
| 05/19/2004 | Interim Evening Wed Evening  | Lake Washington                  | Corinthian Yacht Club         |
| 05/19/2004 | Interim Evening-PHRF         | Puget Sound                      | Corinthian Yacht Club         |
| 05/20/2004 | Interim Evening-One Design   | Puget Sound                      | Corinthian Yacht Club         |
| 05/21/2004 | Pt Orchard YC May Fri Night  | Sinclair Inlet                   | Port Orchard Yacht Club       |

| EVENT DATE | EVENT NAME                     | EVENT LOCATION                    | SPONSOR                       |
|------------|--------------------------------|-----------------------------------|-------------------------------|
| 05/21/2004 | Pacific Challenge              | Port Townsend Bay                 | Wooden Boat Foundation        |
| 05/21/2004 | Fun on Fridays Series          | Commencement Bay                  | Corinthian YC of Tacoma       |
| 05/21/2004 | Friday Night Log Dodge         | Possession Sound                  | Milltown Sailing Association  |
| 05/22/2004 | Sloop Tavern Spring Regatta    | West Point                        | Sloop Tavern Yacht Club       |
| 05/22/2004 | Port Orchard WSSA Invitational | Sinclair Inlet/Port Orchard Inlet | Port Orchard Yacht Club       |
| 05/23/2004 | Ski to Sea Regatta             | Bellingham Bay                    | Bellingham Bay                |
| 05/23/2004 | SYC Jack and Jill Series Race  | Vicinity Shilshole Bay Marina     | Seattle Yacht Club            |
| 05/24/2004 | Sloop Tavern Ballard Cup       | Shilshole Marina                  | Sloop Tavern Yacht Club       |
| 05/24/2004 | Ballard Cup Series 1           | Puget Sound                       | Shilshole Bay Yacht Club      |
| 05/24/2004 | Ski to Sea Regatta             | Bellingham Bay                    | Bellingham Bay                |
| 05/25/2004 | Interim Evening Tues Evening   | Lake Washington                   | Corinthian Yacht Club         |
| 05/26/2004 | Spring Series 4                | Bellingham Bay                    | Bellingham Bay                |
| 05/26/2004 | Wind Seekers Summer Eve A      | Commencement Sound                | Wind Seekers Yacht Club       |
| 05/26/2004 | Ballard Cup Series 1           | Puget Sound                       | Shilshole Bay Yacht Club      |
| 05/26/2004 | Interim Evening-PHRF           | Puget Sound                       | Corinthian Yacht Club         |
| 05/26/2004 | Interim Evening Wed Evening    | Lake Washington                   | Corinthian Yacht Club         |
| 05/27/2004 | Interim Evening-One Design     | Puget Sound                       | Corinthian Yacht Club         |
| 05/28/2004 | UW Rowing Races                | Lake Washington                   | University of Washington Crew |
| 05/28/2004 | Pt Orchard YC May Fri Night    | Sinclair Inlet                    | Port Orchard Yacht Club       |
| 05/28/2004 | ORCA Junior Sailing Clinic     | Vicinity Shilshole Bay Marina     | Seattle Yacht Club            |
| 05/28/2004 | ORCA Jr. Clinic                | West Point                        | Corinthian Yacht Club         |
| 05/29/2004 | ORCA Jr. Clinic                | West Point                        | Corinthian Yacht Club         |
| 05/29/2004 | ORCA Junior Sailing Clinic     | Vicinity Shilshole Bay Marina     | Seattle Yacht Club            |
| 05/30/2004 | Kayak Race                     | Squalicum Harbor                  | Bellingham/Whatcom Co         |
| 05/30/2004 | ORCA Jr. Clinic                | West Point                        | Corinthian Yacht Club         |
| 05/30/2004 | ORCA Junior Sailing Clinic     | Vicinity Shilshole Bay Marina     | Seattle Yacht Club            |
| 05/30/2004 | Mid Dist.                      | Possession Sound                  | Milltown Sailing Association  |
| 05/30/2004 | ORCA Junior Sailing Clinic     | Vicinity Shilshole Bay Marina     | Seattle Yacht Club            |

## SECTION VIII – LIGHT LIST CORRECTIONS

An Asterisk \*, indicates the column in which a correction has been made to new information

| (1)<br>No. | (2)<br>Name and Location  | (3)<br>Position                | (4)<br>Characteristic | (5)<br>Height | (6)<br>Range | (7)<br>Structure       | (8)<br>Remarks  |
|------------|---|--------------------------------|-----------------------|---------------|--------------|------------------------|---|
| 10365      | <b>Welch Island</b><br>PRICE ISLAND<br>LIGHT 35                                     | 46 15 16 N<br>123 26 40 W<br>* | <b>FI G</b> 4s        | 12            | 5            | SG on pile structure.  | 19/04   |
| 15785      | <b>Grays Harbor</b><br>- NORTH CHANNEL<br>RANGE F FRONT<br>LIGHT                    | 46 58 12 N<br>123 55 54 W<br>* | <b>Q W</b>            | 27            |              | KRB on pile structure. | Visible all around;<br>higher intensity on<br>rangeline 19/04 |
| 15790      | - NORTH CHANNEL<br>RANGE F REAR<br>LIGHT<br>12 yards, 255° from<br>front light<br>* |                                | <b>Iso W</b> 6s       | 45            |              | KRB on pile structure. | Visible 5.5°each side<br>of rangeline 19/04                   |
| 16005      | <b>Westhaven</b><br>- OUTER<br>BREAKWATER<br>NORTH LIGHT 8                          | 46 54 38 N<br>124 06 29 W<br>* | <b>FIR</b> 4s         | 15            | 4            | TR on pile.            | Higher intensity<br>beam up channel. 19/04                    |
| 16010      | - OUTER<br>BREAKWATER<br>SOUTH LIGHT 10   | 46 54 32 N<br>124 06 26 W<br>* | <b>QR</b>             | 15            | 4            | TR on pile.            | Higher intensity<br>beam down<br>channel. 19/04               |
| 18591<br>* | <b>Snohomish River</b><br>OUTFALL PIPE<br>LIGHTED BUOY A<br>*                       | 48 00 15 N<br>122 10 38 W<br>* | <b>FI Y</b> 10s<br>*  |               |              | Yellow can.<br>*       | Private aid.<br>* 19/04                                       |

|       |                |             |          |             |              |       |
|-------|----------------|-------------|----------|-------------|--------------|-------|
| 18592 | OUTFALL PIPE   | 47 59 28 N  | FI Y 10s | Yellow can. | Private aid. | 19/04 |
| *     | LIGHTED BUOY B | 122 10 44 W | *        | *           | *            |       |
|       | *              | *           |          |             |              |       |

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## PUBLICATION CORRECTIONS

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## ENCLOSURES

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Oregon - Washington - Columbia River - Dredging Operations >See Append 1<  
Oregon - Tabulation - Coos Bay and Isthmus Slough Channel >See Append 2<

If you have any questions, comments, or need additional information concerning this or other LNM's or the LNM Mailing List (e.g. additions, deletions, corrections) contact the address or phone number on the front page.

D. R. McCRIMMON, JR.  
Commander, U.S. Coast Guard  
Chief, Aids to Navigation & Waterways Management Branch  
Thirteenth Coast Guard District  
By direction of the District Commander

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### OREGON – WASHINGTON – COLUMBIA RIVER – Dredging Operations

Dredging operations are planned or in progress at the following locations:

| Start Date  | End Date | Times                        | Location   | Dredge Vessel       | Assist Vessel | Channels Monitored  | Disposal Area                                   | LNM   |
|-------------|----------|------------------------------|--|---------------------|---------------|---------------------|---|-------|
| In progress | 31 May04 | 24 hours<br>7 days           | <u>Grays Harbor</u><br>Navigational Channel Outer Harbor | Sugar Island        | Rouge River   | 13 and 16<br>VHF-FM | Point Chehalis<br>Open Water<br>Disposal Area   | 18/04 |
| In progress | 28 May04 | 24 hours<br>7 days           | <u>Grays Harbor</u><br>Bar Channel and Entrance Channel  | Essayons<br>Yaquina |               | 13 and 16<br>VHF-FM | South Beach<br>and Half Moon<br>Bay             | 19/04 |
| In progress | 17 May04 | 0700<br>to 1800<br>Mon - Fri | <u>Columbia River</u><br>River Mile 118.5 to 119.5       | Dredge 10           |               | 13 and 16<br>VHF-FM | Ashore at<br>Rinker<br>Materials<br>Sundial Pit | 12/04 |

\*US Army Corps of Engineer dredges request mariners transit at their slowest safe speed to minimize wake when in the vicinity of a dredge and proceed after passing arrangements have been made.

CHART 18587

| COOS BAY AND ISTHMUS SLOUGH CHANNEL DEPTHS  |                            |                              |                             |                |                    |                            |                         |
|---|----------------------------|------------------------------|-----------------------------|----------------|--------------------|----------------------------|-------------------------|
| TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO FEB 2004                |                            |                              |                             |                |                    |                            |                         |
| CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)                |                            |                              |                             |                | PROJECT DIMENSIONS |                            |                         |
| NAME OF CHANNEL   | LEFT<br>OUTSIDE<br>QUARTER | MIDDLE<br>HALF OF<br>CHANNEL | RIGHT<br>OUTSIDE<br>QUARTER | DATE OF SURVEY | WIDTH<br>(FEET)    | LENGTH<br>(NAUT.<br>MILES) | DEPTH<br>MLLW<br>(FEET) |
| ENTRANCE RANGE  | 39                         | 39                           | 38                          | 2-04           | ---                | 1.9                        | 47-37                   |
| ENTRANCE RANGE AND TURN   | 39                         | 46                           | 32                          | 8-03           | 300-1050           | 0.5                        | 37                      |
| INSIDE RANGE  | 38                         | 38                           | 38                          | 8-03           | 300                | 0.6                        | 37                      |
| COOS BAY RANGE  | 36                         | 37                           | 37                          | 8-03,2-04      | 300                | 1.6                        | 37                      |
| EMPIRE RANGE  | 36                         | 37                           | 38                          | 2-04           | 300                | 1.3                        | 37                      |
| LOWER JARVIS RANGE  | 35                         | 35                           | 36                          | 2-04           | 300                | 0.8                        | 37                      |
| JARVIS TURN   | 37                         | 38                           | 33                          | 2-04           | 300                | 0.5                        | 37                      |
| UPPER JARVIS RANGE  | 33                         | 34                           | 34                          | 2-04           | 300-700            | 1.9                        | 37                      |
| NORTH BEND LOWER RANGE  | 38                         | 38                           | 37                          | 2-04           | 400                | 0.4                        | 37                      |
| NORTH BEND RANGE  | 32                         | 37                           | 33                          | 2-04           | 400                | 0.9                        | 37                      |
| NORTH BEND UPPER RANGE  | 35                         | 38                           | 37                          | 2-04           | 400                | 0.6                        | 37                      |
| LOWER TURNING BASIN   | 35                         | 38                           | 36                          | 2-04           | 400-900            | 0.3                        | 37                      |
| FERNDAL E LOWER RANGE   | 39                         | 39                           | 38                          | 2-04           | 400                | 0.4                        | 37                      |
| FERNDAL E TURN  | 36                         | 38                           | 38                          | 2-04           | 400                | 0.2                        | 37                      |
| FERNDAL E UPPER RANGE   | 26                         | 36                           | 34                          | 2-04           | 400                | 0.7                        | 37                      |
| MARSHFIELD RANGE  | 37                         | 36                           | 33                          | 2-04           | 400                | 0.4                        | 37                      |
| MARSHFIELD RANGE TO<br>ISTHMUS SLOUGH   | 35                         | 33                           | 31                          | 2-04           | 150-750            | 0.9                        | 37                      |
| ISTHMUS SLOUGH  | 19                         | 20                           | 19                          | 4-85           | 150                | 2.0                        | 22                      |
| NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION |                            |                              |                             |                |                    |                            |                         |